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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,866	06/14/2005	Martine Cochet	124234	5718
25944 7590 12/14/2007 OLIFF & BERRIDGE, PLC P.O. BOX 320850 ALEXANDRIA, VA 22320-4850			EXAMINER CROUSE, BRETT ALAN	
			ART UNIT 1794	PAPER NUMBER
			MAIL DATE 12/14/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/538,866	<b>Applicant(s)</b> COCHET ET AL.	
	<b>Examiner</b> Brett A. Crouse	<b>Art Unit</b> 1794	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 June 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 21-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 21-29, and 35-39 are rejected under 35 U.S.C. 102(b) as being anticipated by Ermantraut et al., WO 02/077620, hereinafter known as Ermantraut, as evidenced by US 2004/0196455, which is being used as a translation.

Ermantraut teaches:

As to claims 21, 26, 27, 28:

Paragraph [0030], teaches it is the object of Ermantraut to provide devices for the calibration of fluorescence detection systems.

Paragraph [0033], teaches the device can comprise one or more fluorescent layers. The fluorescent materials are applied to defined regions.

Paragraphs [0038]-[0039], teach the fluorescent layers can be one or more polymer layers. Each layer can comprise one or more fluorescent materials.

Paragraph [0044], teaches the intensity of the fluorescence in each of the defined regions can be selected.

Paragraphs [0046]-[0047], claim 8, teach the intensity of the fluorescence can be selected by physical treatment methods, such as by irradiating the polymer layers. The passage additionally teaches that the polymer is photosensitive. The passage additionally

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postulates the degree of linkage or cross-linkage is responsible for the intensity of fluorescence and teaches that one of ordinary skill in the art can selectively control the degree of cross-linking. The is held to teach that a person of ordinary skill can select a degree of cross-linking including non-crosslinked.

As to claims 22, 23, 35, 36, 38, 39:

Figure 1, teaches multiple layers of fluorescent material deposited in distinct regions. The regions can be individually irradiated. The figure additionally teaches openings to the level of the substrate. The figure also teaches the method of depositing one or more layers of fluorescent material and selectively exposing regions of the fluorescent material.

Paragraphs [0096]-[0117], Examples 1 and 2, figure 1, teach forming multiple regions having one or more layers. The layers can have multiple regions of polymer having various intensities due to variation in thickness and/or composition. Regions of the substrate are additionally not covered by polymer.

As to claim 29:

Paragraph [0111], example 2, figure 2B, teaches a glass substrate.

As to claim 37:

Paragraphs [0059]-[0060], teach integrating the fluorescent polymer regions with biological samples.

As to claims 24, 25:

Paragraphs [0096]-[0117], Examples 1 and 2, figure 1, teach multiple areas of fluorescence and openings to the level of the substrate. Glass is used as the substrate in examples 1 and 2. It is the examiner's position that the glass substrate is non-fluorescent

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and as such would inherently exhibit fluorescence at least 10 or at least 100 times lower than the first fluorescence level.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 30-34 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ermantraut et al., WO 02/077620, hereinafter known as Ermantraut, as evidenced by US 2004/0196455, which is being used as a translation as applied to claims 21-23, 26-29 and 35-39 above, and further in view of Yamasaki et al., US 6,242,114, hereinafter known as Yamasaki.

The teachings of Ermantraut as in the rejection above are relied upon.

Ermantraut does not teach:

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Ermantraut does not teach the use or deposition of a protective coating layer.

Yamasaki teaches:

Column 1, lines 5-10, teach fluorescence references for checking the operation of fluorescence measuring devices.

Column 4, lines 45-65, figures 2-10, teach various structures of fluorescence references comprising one or more protective layers. The layers provide improved environmental durability and improved durability to cleaning and handling.

Column 6, line 63 through column 7, line 9, figure 13, teaches the formation of fluorescence reference bodies as part of a card and subsequently depositing an encapsulation layer (protective layer).

It would have been obvious to one of ordinary skill in the art at the time of invention to deposit one or more protective layers of Yamasaki upon the fluorescence reference of Ermantraut in order to improve the durability of the devices of Ermantraut. It would have additionally been obvious to deposit one or more protective layers after the formation of the fluorescent layer(s) and any irradiation of the device of Ermantraut in order to protect the protective layers from degradation caused by the irradiation and to reduce the exposure time during possessing by reducing attenuation of the irradiating signal by an intervening layer(s).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brett A. Crouse whose telephone number is 571-272-6494. The examiner can normally be reached on Monday - Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrell H. Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BAC/ 11 December 2007

Callie Shosho

Callie Shosho

Supervising Patent Examiner